

NATURAL RESOURCES are those products and features of the earth that permit it to support life and satisfy people's needs. Land and water are natural resources. So are biological resources on the land and in the water, such as flowers, trees, birds, wild animals, and fish. Mineral resources include oil, coal, metals, stone, and sand. Other natural resources are air, sunshine, and climate. Natural resources are used for



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Conservation Practices, such as the replanting and selective cutting of trees, help to preserve valuable natural resources.

producing (1) food; (2) fuel; and (3) raw materials for the production of finished goods.

This article discusses natural resources in general. For information on the natural resources of specific areas, see the *Natural Resources* section in each state and province article, and in various country articles.

Uses and Importance. Biological resources are the most important natural resources. All the food we eat comes from plants or animals. Since early days, people have used wood from trees for fuel and shelter. Biological resources, in turn, are dependent on other natural resources. Most plants and animals could not live without air, sunshine, soil, and water.

Mineral resources are less important in supporting life, but they are extremely important to modern living. Mineral fuels—including coal, oil, and natural gas—provide heat, light, and power. Minerals serve as raw materials for the production of finished goods, such as automobiles, clocks, dishes, and refrigerators.

The wealth of a nation depends to an important degree on its natural resources. Most wealthy, or *developed* countries—including Canada, Russia, and the

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what they need. Or they may have to substitute one material for another that has become too scarce. For example, aluminum may be used in place of copper for many purposes. While copper is scarce, deposits of bauxite and clay contain more aluminum than the world can ever use.

Mineral fuels are different and can all be used up. The earth contains enough mineral fuels to last only one or two centuries. When these supplies run out, people may depend more on nuclear energy to power autos and factories and to heat homes. Even today, uranium and other nuclear fuels generate electricity. Such fuels will last for many centuries. Sunlight is already used to run the instruments in space satellites, and may someday be used to provide abundant energy. See **NUCLEAR ENERGY**; **SOLAR ENERGY**.

Preserving the delicate balance of nature in biological resources appears to be the most difficult and important part of saving our natural resources. People have often upset this balance. For example, poor farming methods have ruined much fertile farmland and left it barren. Each year, millions of tons of fertile topsoil that could produce good crops are washed away by rains. Chemicals sprayed on crops and washed off by rain sometimes end up in rivers and streams. Some of these chemicals kill the fish in the streams. Some entire species of birds and animals have been killed off by hunters.

Fumes from automobiles and trucks and smoke from factories poison the air. This *air pollution* in many cities kills trees and endangers human health. As more cars and factories are built, the problem gets worse. To correct these conditions, people will have to make big changes in ways of traveling and in ways of generating heat and power. See **AIR POLLUTION**.

Even if natural resources are conserved and developed, the earth will be unable to provide enough food if the population increases too much. With much effort, the amount of land under cultivation could be doubled, and farms in many developing countries could produce three or four times as much as they now do. Scientists also believe people can get much more food from the sea. All this might increase the food supply to 5 or even 10 times what it now is. But at the present rate of increase, the world's population would double in 36 years. If this rate of increase continued, the population would be 7 times as large in 100 years, and 43 times as large in 200 years.

NEAL POTTER

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